234. The method of claim 233, wherein method further comprises performing I/O admission control, determining read-ahead size, or a combination thereof; wherein said performance of I/O admission control and determination of read-ahead size are based at least in part on said determined maximal total number of viewers per storage device or per partitioned group of storage devices, and said determined maximal aggregated consumption rate per storage device or per partitioned group of storage devices.

235. The method of claim 234, wherein said method comprises performing I/O admission control by determining whether or not a capacity of said system is sufficient to support at least one additional viewer based at least in part on said balancing of said I/O capacity with said buffer memory space.

236. The method of claim 234, wherein said method comprises determining read-ahead size by setting a cycle time based at least in part on said balancing of said I/O capacity with said buffer memory space; and determining a number of read ahead data blocks based at least in part on said cycle time, determined maximal aggregated consumption rate per storage device or per partitioned group of storage devices, and a size of said data blocks.

237. The method of claim 234, wherein said method comprises performing said I/O admission control by determining whether or not a capacity of said system is sufficient to support at least one additional viewer based at least in part on said balancing of said I/O capacity with said buffer memory space; and wherein said method further comprises determining read-ahead size by setting a cycle time based at least in part on said balancing of said I/O capacity with said buffer memory space; and determining a number of read ahead data blocks based at least in part on said cycle time, determined maximal aggregated consumption rate per storage device or per partitioned group of storage devices, and a size of said data blocks.

238. The method of claim 224, wherein said logical monitoring comprises monitoring the following system I/O performance characteristics for each logical volume, for each plex within a logical volume, and for each storage device or partitioned group of storage devices within a plex: (A) total number of viewers, (B) aggregated data consumption rate, (C) current weight of workload on a storage device in a plex, and (D) number of outstanding I/O requests for each storage device or partitioned group of storage devices.

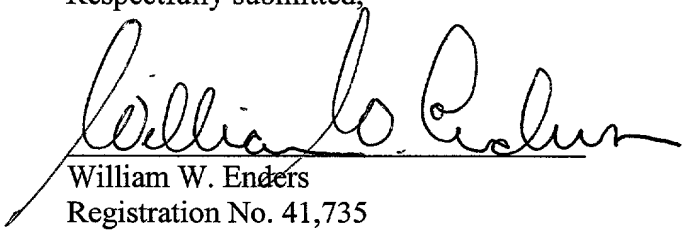
239. The method of claim 224, wherein said method further comprises determining a workload weight distribution for each of said storage devices or partitioned group of storage devices based at least in part on said monitored number of outstanding I/O requests for each storage device or partitioned group of storage devices.

REMARKS

Support for the new claims may be found in the claims as originally filed and throughout the Specification, for example, at page 57, line 11 to page 61, line 9. No New Matter is added.

The examiner is invited to contact the undersigned at the phone number indicated below with any questions or comments, or to otherwise facilitate expeditious and compact prosecution of the application.

Respectfully submitted,



William W. Enders
Registration No. 41,735
Attorney for Applicant

O'KEEFE, EGAN & PETERMAN
1101 Capital of Texas Highway South
Building C, Suite 200
Austin, Texas 78746
(512) 347-1611
FAX: (512) 347-1615

APPENDIX
AMENDMENTS TO THE SPECIFICATION

Replacement paragraph for page 1, lines 1-5:

Patent Application for

"SYSTEMS AND METHODS FOR RESOURCE [MANAGEMENT] MONITORING IN INFORMATION STORAGE ENVIRONMENTS"

Inventors: Chaoxin C. Qiu, Umesh Gupta, Scott C. Johnson, Sarma Kolavasi, Theodore S. Webb, Richard W. Yu, and Mark J. Conrad

Replacement paragraph for page 1, line 7 to page 2, line 5:

This application is a continuation of Application Serial No. 09/947,869, which was filed September 6, 2001 and is entitled "SYSTEMS AND METHODS FOR RESOURCE MANAGEMENT IN INFORMATION STORAGE ENVIRONMENTS", which in turn [This application] claims priority from co-pending United States Patent Application Serial Number 09/879,810 filed on June 12, 2001 which is entitled "SYSTEMS AND METHODS FOR PROVIDING DIFFERENTIATED SERVICE IN INFORMATION MANAGEMENT ENVIRONMENTS," and also claims priority from co-pending Provisional Application Serial No. 60/285,211 filed on April 20, 2001 which is entitled "SYSTEMS AND METHODS FOR PROVIDING DIFFERENTIATED SERVICE IN A NETWORK ENVIRONMENT," and also claims priority from co-pending Provisional Application Serial No. 60/291,073 filed on May 15, 2001 which is entitled "SYSTEMS AND METHODS FOR PROVIDING DIFFERENTIATED SERVICE IN A NETWORK ENVIRONMENT," the disclosures of each of the forgoing applications being incorporated herein by reference. This application also claims priority from co-pending United States Patent Application Serial No. 09/797,198 filed on March 1, 2001 which is entitled "SYSTEMS AND METHODS FOR MANAGEMENT OF MEMORY," and also claims priority from co-pending United States Patent Application Serial No. 09/797,201 filed on March 1, 2001 which is entitled "SYSTEMS AND METHODS FOR MANAGEMENT